#### IN THE UNITED STATES

#### PATENT AND TRADEMARK OFFICE

APPLICANTS: James D. Kelly and Michael L. Regal

APPLICATION NO.: 10/669,119 (REI OF 5,996,036)

FILING DATE: September 22, 2003

TITLE: BUS TRANSACTION REORDERING IN A COMPUTER SYSTEM HAVING

**UNORDERED SLAVES** 

EXAMINER: Glenn Allen Auve

GROUP ART UNIT: 2111

ATTY. DKT. NO.: 18602-08098 (P2080R1C1)

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Dated: June 23, 2008 By: /Sabra-Anne R. Truesdale/

Sabra-Anne R. Truesdale, Reg. No. 55,687

# APPEAL BRIEF

#### **Real Party in Interest**

The subject application is owned by Apple Inc., of Cupertino, California.

#### **Related Appeals and Interferences**

A Notice of Appeal, Pre-Appeal Brief Request for Review, Appeal Brief, and Supplemental Appeal Brief have been filed in co-owned Application No. 11/503,541 (no patent

or appeal numbers available yet). This pending appeal may have a bearing on the Board's decision in the present appeal because it deals with substantially the same issue of law.

Other than as presented above, there are no known related appeals or interferences that may directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

#### **Status of Claims**

Claims 18-19 are pending and stand rejected. Claims 1-17 and 20-26 were previously canceled.

The claims on appeal are claims 18-19, which are set forth in the Claims Appendix.

#### **Status of Amendments**

The appellants have not amended the claims since the final rejection.

#### **Summary of the Claimed Subject Matter**

The claimed subject matter on appeal relates to a product and a method for signaling a slave device having transactions queued for execution to reorder the transactions without signaling a microprocessor of a computer system.

Claim 18 recites an arbitration circuit (arbiter 600 in FIGS. 3 and 6) for a computer system, the arbitration circuit adapted to couple with a plurality of slave devices having transactions queued for execution, the arbitration circuit further adapted to signal any of the plurality of slave devices to reorder their transactions without signaling a microprocessor (CPU 203 in FIG. 2; secondary microprocessor 218 of FIG. 2) of the computer system. (Col. 9, line 30 to col. 11, line 37; col. 18, line 16 to col. 19, line 56.) The slave devices can include the

expansion bus bridge (FIG. 2), an additional expansion bus bridge, the video bus bridge 220 (FIG. 2), the main memory 209 (FIG. 2), the read-only memory 211 (FIG. 2), and memory controller registers accessible via the register data bus 217 (FIG. 2). (Col. 7, lines 51-56.)

Claim 19 recites a computer-implemented method for reordering transactions. A plurality of transactions for execution are received and queued within a slave device. (Col. 7, lines 25-33.) The slave device is signaled to reorder its transactions. (Col. 10, line 60 to col. 11, line 33.) A microprocessor of the computer system is not signaled that the transactions are being reordered. (Col. 9, line 30 to col. 11, line 37; col. 18, line 16 to col. 19, line 56.)

## Grounds of Rejection to be Reviewed on Appeal

This appeal concerns whether claims 18-19 are unpatentable under 35 U.S.C. § 251 as being broadened in a reissue application filed outside the statutory two-year period.

#### Argument

I. The claims in this reissue application were not impermissibly broadened beyond the statutory two-year period because an intent to seek broader claims was presented in a parent reissue application to which these claims are entitled the benefit under § 120. (Claims 18-19)

The presently rejected claims 18-19 were included upon the initial filing of the present application on September 22, 2003. In the latest Office Action, claims 18-19 were rejected under 35 U.S.C. § 251 as being broadened claims that were filed in a reissue application outside the statutory two-year period. This rejection is clearly erroneous and without legal or factual basis.

This application is a continuation reissue of Application No. 10/006,939 (filed November 30, 2001, now RE38,428), which is a reissue of U.S. Patent No. 5,996,036 (issued November 30, 1999). As the examiner acknowledged, Applicants filed the initial reissue application within two

years of the issue date of the original '036 patent, and this initial reissue application included a reissue declaration that sought to broaden the claims of the issued patent. Applicants subsequently filed the present continuation reissue application to include additional claims, claiming the benefit of the first broadening reissue application under 35 U.S.C. § 120.

Relevant to this appeal, the presently rejected claims 18-19 broaden the originally issued claims to address errors that are not covered by the errors presented in the original reissue declaration that was submitted within the two-year time period. The examiner rejected claims 18-19 on this basis. In the latest Office Action, the Examiner supported the rejection using the following reasoning:

Thus, according to applicant, if a patentee is "lucky" enough to have cause to file a broadening reissue within two years of the original patent, he/she is essentially given a free license to broaden the claims further and in entirely different or unrelated ways during the entire term of the patent as long as the patentee maintains a perpetual and continuing chain of reissue applications. This is contrary to the strong public policy intended to be enforced by the last paragraph of 35 U.S.C. § 251.

(Office Action, Nov. 20, 2007, p. 2.)

This reasoning is taken almost word-for-word from a previous decision by this Board, *Ex parte Luu*, Appeal No. 96-1181, Application No. 08/188,764 (BPAI 1997) (unpublished) (page 18). However, any reliance on this nonprecedential Board decision is misplaced. In *Luu*, the applicants presented broadening claims in a reissue application of a pending reissue application, where the new reissue application was filed more than two years from the original patent grant. The Board in *Luu* held that this was impermissible for two reasons. First, the latter reissue was an attempt to reissue the first reissue; it was not a continuation of that first reissue application. Because it did not claim the benefit under § 120 of the filing date of the first reissue application, the second reissue was barred as being filed outside the statutory two-year period. *Luu*, at 21.

Second, the latter reissue was filed while the first reissue was still pending. This was impermissible because a pending application (even a reissue application) cannot be reissued because it has not yet been issued in the first place. *Id.* at 22.

The examiner seeks to impose a requirement that, when broadening claims are presented in a continuation reissue application, the newly broadened claims should be broadened in a way that is covered under the original reissue declaration filed in the reissue parent which was filed within two years of issue of the original patent. Because claims 18-19 in this application are not related to the reissue declaration of the original broadening reissue, the examiner asserts that these claims are barred by § 251. But this rejection is fundamentally flawed because there is no such requirement.

A patent can be broadened in a reissue application as long as the reissue application is "applied for within two years from the grant of the original patent." 35 U.S.C. § 251. When determining whether the two-year requirement of § 251 has been met, the proper inquiry is whether a proposal for broadened claims was made so that the public was put on notice of the applicant's intent to broaden the claims within two years of the grant of the original patent. *In re Graff*, 111 F.3d 874, 877 (Fed. Cir. 1997). The law thus requires only that the intent to broaden be presented within this two-year time period; it does not require an applicant to specify within that time period the eventual scope of the broadening. The examiner's stricter requirement of limiting the scope of permissible broadening to the original reissue declaration is therefore inconsistent with the law.

Not only do the applicable statutes and relevant case law refute the examiner's position, the MPEP directly contradicts it. Specifically, the MPEP confirms that the relevant inquiry is whether <u>any</u> intent to broaden the claims is made within the two-year period:

A broadened claim can be presented within two years from the grant of the original patent in a reissue application. In addition, a broadened claim can be presented *after* two years from the grant of the original patent in a broadening reissue application which was filed *within* two years from the grant. Where any intent to broaden is indicated in the reissue application within the two years from the patent grant, a broadened claim can subsequently be presented in the reissue after the two year period.

MPEP § 1412.03 (emphasis added). Moreover, the MPEP specifically addresses the scenario here, where the claims are broadened after the two-year period in a way that is unrelated to the broadening presented during that period. The MPEP explains that this is permissible – contrary to the examiner's position – even where the later broadened claims are presented in a continuing reissue application:

Thus, a broadened claim may be presented in a reissue application after the two years, even though the broadened claim presented after the two years is different than the broadened claim presented within the two years. Finally, if intent to broaden is indicated in a parent reissue application within the two years, a broadened claim can be presented in a continuing (continuation or divisional) reissue application after the two year period.

#### *Id.* (emphasis added).

Accordingly, there is no legal basis for the examiner's enhanced requirement that the broadened claims 18-19 be related to an error identified in the original reissue declaration.

Because Applicants in the present case filed a reissue application to broaden the claims of the original patent within the two-year period proscribed by § 251, Applicants are entitled to continue broadening the claimed subject matter to correct errors beyond those identified in the original reissue declaration.

Although *Luu* is clearly inapposite, the Patent Act and the MPEP both compel that this rejection be reversed.

II. This reissue application was not filed before the application it seeks to reissue issued, since this reissue application seeks to reissue U.S. Patent No. 5,996,036 (issued

November 30, 1999), not original reissue Application No. 10/006,939 (filed November 30, 2001, now RE38,428). (Claims 18-19)

In the latest Office Action, claims 18-19 were rejected under a second ground for allegedly seeking to reissue original reissue Application No. 10/006,939 (filed November 30, 2001, now RE38,428) before that reissue application had issued. This rejection is clearly erroneous and without legal or factual basis. The Examiner supported the rejection using the following reasoning:

Applicants cannot have it both ways. If they desire the earlier filing date of the first reissue application, available under 35 U.S.C. § 120 and 37 C.F.R. § 160, they cannot seek reissue of reissue patent RE38,428. On the other hand, if they desire to reissue patent RE38,428, they cannot claim the earlier filing date of the first reissue application under the continuation practice of 35 U.S.C. § 120 and 37 C.F.R. § 160.

(Office Action, Nov. 20, 2007, p. 3.) The reasoning is taken almost word-for-word from *Luu* (page 22). The rejection, therefore, is based on the examiner's misunderstanding about whether the present application is an attempt to reissue a reissue application or is a continuation of a reissue application.

In fact, the present application does not seek to reissue the first reissue Application No. 10/006,939 (filed November 30, 2001, now RE38,428). Instead, the present application seeks to reissue U.S. Patent No. 5,996,036 (issued November 30, 1999). The present application is a continuation of the first reissue application, not a reissue of the first reissue application. The Board in *Luu* explicitly distinguished this (permissible) situation from the (impermissible) situation presented by the Luu application: "Appellants are not seeking a second reissue of the original patent, but rather, are seeking a first reissue of the first reissue patent." *Id.* at 15. Moreover, the Board in *Luu* cautioned that its holding should be narrowly limited to the particular fact situation that existed in that case. *Id.* at 8.

Accordingly, the examiner's observation that original reissue Application No. 10/006,939 had not been granted when the present reissue application was filed (Office Action, Nov. 20, 2007, p. 4) actually supports patentability. The present application is a <u>continuation</u> of original reissue Application No. 10/006,939, so it must be filed while that reissue application was still pending to claim the benefit of its filing date under § 120.

III. This reissue application seeks to reissue U.S. Patent No. 5,996,036 (issued November 30, 1999), in which error arose without deceptive intention. (Claims 18-19)

In the latest Office Action, claims 18-19 were rejected under a third ground for allegedly seeking to reissue original reissue Application No. 10/006,939 (filed November 30, 2001, now RE38,428) where there was allegedly no error without any deceptive intention. This rejection is clearly erroneous and without legal or factual basis. The Examiner supported the rejection using the following reasoning:

[T]here is no error without deceptive intent within the meaning of the statute because applicants took no steps to correct the defect before the issuance of reissue patent RE38,428.

and

[A]ppellants' failure to try and stop the grant of the defective reissue patent RE38,428 is factual evidence that there was no "error without any deceptive intention" in granting of reissue patent RE38,428.

(Office Action, Nov. 20, 2007, p. 4.)

This reasoning, also taken almost word-for-word from *Luu* (pages 4 and 27, respectively), does not apply here. As explained above, the present application does not seek to reissue original reissue Application No. 10/006,939 (filed November 30, 2001, now RE38,428). Instead, the present application is a continuation application that seeks to reissue U.S. Patent No. 5,996,036 (issued November 30, 1999).

The Patent Act provides: "Whenever any patent is, through error without any deceptive

intention, deemed wholly or partly inoperative or invalid . . . the Director shall . . . reissue the

patent . . . . " 35 U.S.C. § 251. The "error without any deceptive intention" referred to in the

statute is the error that occurred in the patent to be reissued. Since the patent being reissued is the

original patent, not the first reissue application, Applicants' "failure to try and stop the grant of

the defective reissue patent" is irrelevant. The first reissue application was not "defective"; the

original patent was defective. Applicants are entitled to correct the errors in the original patent

using multiple reissue applications, so Applicants had no duty to try to stop the grant of the first

reissue application.

**Summary** 

For the foregoing reasons, the rejection of claims 18-19 under § 251 is clearly erroneous,

and reversal of the rejections is respectfully requested.

Respectfully submitted,

James D. Kelly and Michael L. Regal

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By: /Sabra-Anne R. Truesdale/

Sabra-Anne R. Truesdale, Reg. No. 55,687

Attorney for Applicants Fenwick & West LLP

801 California Street

Mountain View, CA 94041

Tel.: (650) 335-7187

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Fax: (650) 938-5200

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## **Claims Appendix**

- 18. An arbitration circuit for a computer system, the arbitration circuit adapted to couple with a plurality of slave devices having transactions queued for execution, the arbitration circuit further adapted to signal any of the plurality of slave devices to reorder their transactions without signaling a microprocessor of the computer system.
- 19. A computer-implemented method for reordering transactions, the method comprising:

  receiving and queuing within a slave device a plurality of transactions for execution; and
  signaling the slave device to reorder its transactions without signaling a microprocessor

  of the computer system that the transactions are being reordered.

# **Evidence Appendix**

None

# **Related Proceedings Appendix**

None